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21 UNITED STATES DISTRICT COURT
22
23 NORTHERN DISTRICT OF CALIFORNIA
24
25 SAN FRANCISCO DIVISION

26
27 GOOGLE LLC,
28 vs.
29 Plaintiff,
30 SONOS, INC.,
31 Defendant.

32 Case No. 3:20-cv-06754-WHA
33 Related to Case No. 3:21-cv-07559-WHA

34
35 **GOOGLE LLC'S REPLY IN SUPPORT
36 OF MOTION FOR SUMMARY
37 JUDGMENT**

38 The Hon. William H. Alsup
39 Date: March 30, 2023
40 Time: 8:00 a.m.
41 Location: Courtroom 12, 19th Floor

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TABLE OF CONTENTS

	<u>Page</u>
I. THE ASSERTED CLAIMS OF THE '033 PATENT ARE INVALID.....	1
A. Google Is Not Judicially Estopped From Arguing That The YTR Uses A Remote Playback Queue	1
B. YTR2 Discloses A “Remote Playback Queue”.....	3
1. Party Mode	3
2. Service-Recommended Videos	5
C. The YTR Discloses Limitation 1.7 Of The '033 Patent.....	5
II. THE ASSERTED '885 AND '966 PATENT CLAIMS ARE INVALID AS OBVIOUS	7
A. Sonos 2005 System and Sonos Forums Render Obvious the Disputed Elements	7
B. There is a Motivation to Combine Sonos 2005 System and Sonos Forums, and a Reasonable Expectation of Success.....	9
C. The Prior Art is Enabling	10
D. There Is No Objective Evidence of Non-Obviousness	10
III. GOOGLE’S REDESIGNED PRODUCTS DO NOT INFRINGE ANY ASSERTED CLAIM OF THE '885 OR '966 PATENTS	11
A. Sonos and Dr. Almeroth’s Assumption That Inactive Speakers Must Be in “Standalone Mode” Is Unsupported and Illogical.....	11
B. Sonos’s Reliance on the Summary Judgment Order Is Misplaced	12
C. Sonos’s Attempt to Distinguish the '966 Patent Claims Fails	13
IV. SONOS’S WILLFUL AND INDIRECT INFRINGEMENT CLAIMS FAIL	13

TABLE OF AUTHORITIES

Page

Cases

4	<i>01 Communique Lab., Inc. v. Citrix Sys., Inc.</i> , 889 F.3d 735 (Fed. Cir. 2018).....	4
5	<i>ABT Sys., LLC v. Emerson Elec. Co.</i> , 797 F.3d 1350 (Fed. Cir. 2015).....	10
6	<i>Apple Inc. v. Samsung Elecs. Co.</i> , 839 F.3d 1034 (Fed. Cir. 2016).....	11
7	<i>Auto. Techs. Int'l, Inc. v. BMW of N. Am., Inc.</i> , 501 F.3d 1274 (Fed. Cir. 2007).....	10
8	<i>Balfour Beatty Infrastructure, Inc. v. PB&A, Inc.</i> , 2017 WL 1739101 (N.D. Cal. May 4, 2017)	1, 2
9	<i>ClassCo, Inc. v. Apple, Inc.</i> , 838 F.3d 1214 (Fed. Cir. 2016).....	11
10	<i>Contra Gator Tail, LLC v. Mud Buddy LLC</i> , 618 F. App'x 992 (Fed. Cir. 2015).....	9, 10
11	<i>DSU Med. Corp. v. JMS Co.</i> , 471 F.3d 1293 (Fed. Cir. 2006)	14
12	<i>Fairbank v. Wunderman Cato Johnson</i> , 212 F.3d 528 (9th Cir. 2000).....	13
13	<i>Gator Tail, LLC v. Mud Buddy LLC</i> , 618 F. App'x 992 (Fed. Cir. 2015).....	9, 10
14	<i>Google LLC v. Princeps Interface Techs. LLC</i> , 2020 WL 1478352 (N.D. Cal. Mar. 26, 2020)	15
15	<i>Henny Penny Corp. v. Frymaster LLC</i> , 938 F.3d 1324 (Fed. Cir. 2019)	9
16	<i>KSR Int'l Co. v. Teleflex, Inc.</i> , 550 U.S. 398 (2007)	8
17	<i>Largan Precision Co, Ltd v. Genius Elec. Optical Co.</i> , 86 F. Supp. 3d 1105 (N.D. Cal. 2015)	14
18	<i>MasterObjects, Inc. v. Meta Platforms, Inc.</i> , 2022 WL 12039301 (N.D. Cal. Oct. 20, 2022)	1
19	<i>Nat'l Recovery Techs., Inc. v. Magnetic Separation Sys., Inc.</i> , 166 F.3d 1190 (Fed. Cir. 1999)	10

1	<i>New Hampshire v. Maine</i> , 532 U.S. 742 (2001)	1
2	<i>Optivus Technology, Inc. v. Ion Beam Applications S.A.</i> , 469 F.3d 978 (Fed. Cir. 2006)	9
4	<i>Pi-Net Int'l Inc. v. JPMorgan Chase & Co.</i> , 42 F. Supp. 3d 579 (D. Del. 2014)	10
5	<i>Sonos, Inc. v. Google LLC</i> , 591 F. Supp. 3d 638 (N.D. Cal. 2022)	13
7	<i>SRI Int'l v. Matsushita Elec. Corp.</i> , 775 F.2d 1107 (Fed. Cir. 1985)	13
8	<i>Straight Path IP Grp., Inc. v. Cisco Sys., Inc.</i> , 2017 WL 6372971 (N.D. Cal. Dec. 13, 2017)	1
10	<i>Vasudevan Software, Inc. v. TIBCO Software Inc.</i> , 2012 WL 1831543 (N.D. Cal. May 18, 2012)	14
11	<i>Vita-Mix Corp. v. Basic Holding, Inc.</i> , 581 F.3d 1317 (Fed. Cir. 2009)	15
13	<i>ZUP, LLC v. Nash Mfg., Inc.</i> , 896 F.3d 1365 (Fed. Cir. 2018)	10
14	<u>Rules and Regulations</u>	
15	Local Rule 5-1	17
16		
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TABLE OF EXHIBITS

Exhibit No.	Description
1	Transcript from the January 6, 2023 Deposition of Janos Levai
2	November 30, 2022 Opening Expert Report of Dr. Dan Schonfeld Regarding U.S. Patent No. 10,848,885 and U.S. Patent No. 10,469,966
3	November 30, 2022 Opening Expert Report of Dr. Kevin C. Almeroth
4	Exhibit Q to the November 30, 2022 Opening Expert Report of Dr. Kevin C. Almeroth
5	Transcript from the January 30, 2023 Deposition of Kevin Almeroth
6	Transcript from the May 10, 2022 Deposition of Kenneth J. MacKay
7	February 28, 2023 Declaration of Kenneth MacKay

1 Sonos's response fails to identify any genuine disputes of material facts as to any of the
 2 issues on which Google has moved for summary judgment. Google's motion should be granted¹

3 **I. THE ASSERTED CLAIMS OF THE '033 PATENT ARE INVALID**

4 **A. Google Is Not Judicially Estopped From Arguing That The YTR Uses A**
Remote Playback Queue

5 During the showdown, the invalidity dispute focused on a limitation of the '615 patent
 6 reciting that a playback device stores "a local playback queue" (the "LPQ" limitation). Google
 7 argued that Version 1 of the YTR application ("YTR1") anticipated this limitation because YTR1
 8 created a playback queue stored locally on a playback device in the context of user-created
 9 playlists. Dkt. 221-3 at 16-18. By 2014, however, the ability to store a local playback queue had
 10 been discontinued. *Id.* at 5. Thus, when playback devices in the currently accused YouTube
 11 systems play media, the playback queue is stored in the cloud, and playback devices temporarily
 12 cache the current and next (and sometimes previous) items in the cloud queue. *Id.* at 7-10. But
 13 nothing about YTR1's use of a local playback queue for user-created playlists (a showdown issue)
 14 has anything to do with the "party mode" or service-recommended functionalities of Version 2 of
 15 the YTR application ("YTR2") (at issue here). Sonos's judicial estoppel argument thus has no merit.
 16

17 To determine if estoppel applies, courts apply a three-part test: whether (1) a party's later
 18 position is "clearly inconsistent" with its earlier position; (2) the party "succeeded in persuading a
 19 court to accept" the earlier position; and (3) the party would "derive an unfair advantage or impose
 20 an unfair detriment" on the other side if not estopped. *New Hampshire v. Maine*, 532 U.S. 742, 750-
 21 51 (2001). "[J]udicial estoppel is reserved for more egregious conduct than just threshold
 22 inconsistency." *Balfour Beatty Infrastructure, Inc. v. PB&A, Inc.*, 2017 WL 1739101, at *5 (N.D.
 23

24 ¹ Sonos asserts that Google has filed "four motions" for summary judgment. Dkt. 483. Sonos
 25 points to the Court's Case Management Order, which states "a movant should base its motion on its
 26 best *ground* for summary relief" (Opp. at 1), yet that paragraph also directs a party to "alert the other
 27 side of the specific grounds for its contemplated motion [for summary judgment]." Dkt. 67 ¶ 20
 28 (emphasis added). Sonos's argument is inconsistent with its position that Google waived any
 invalidity grounds that it did not assert in its "showdown" summary judgment motion. Dkt. 448 at
 1, 5. Regardless, parties regularly file summary judgment motions on multiple grounds. *See, e.g.*,
MasterObjects, Inc. v. Meta Platforms, Inc., 2022 WL 12039301, at *1 (N.D. Cal. Oct. 20, 2022);
Straight Path IP Grp., Inc. v. Cisco Sys., Inc., 2017 WL 6372971, at *1 (N.D. Cal. Dec. 13, 2017).

1 Cal. May 4, 2017) (internal quotations and citations omitted). None of the factors are met here.

2 First, there is no inconsistency in (i) YTR1 using a local playback queue for user-created
 3 playlists and (ii) YTR2 using a remote playback queue for entirely separate scenarios—*i.e.*, party
 4 mode and service-recommended playlists. Indeed, Google never “told the Court that the existence
 5 of a ‘local playback queue’ in a system is ‘mutually exclusive of a ‘remote playback queue’” during
 6 the showdown (Opp. at 2). The statements quoted by Sonos simply explain that the accused
 7 YouTube applications “maintain the queue” in the cloud and that the ability of a “speaker” to ask
 8 the cloud queue for the “next item in the queue” does not disclose a local playback queue. Dkt. 308
 9 at 59:16-60:9. And Google’s expert made clear that he was ***not*** taking the position that a local
 10 playback queue is mutually exclusive of a remote playback queue:

11 Dr. Schmidt contends that the “core” of my non-infringement opinion “is the faulty
 12 premise that a ‘local playback queue’ and a ‘Cloud Queue’ are mutually exclusive.”
 13 , , , **This is a misunderstanding or misrepresentation of my position regarding**
the differences between a “cloud queue” and a “local playback queue.”

14 ...
 15 Dr. Schmidt states: “I see nothing in claim 13 that precludes the possibility that some
 16 other queue (e.g., a cloud queue) might exist in the system beyond the claimed ‘local
 17 playback queue.’” Schmidt Rpt., ¶277. **I have not precluded such an architecture.**
 18 ... **A system might store the playback queue both at the local playback device**
and remotely. This is not the case with the accused products.

19 Dkt. 355 at 13 (citing Bhatta. Reb. Showdown Rpt.) ¶¶ 319-20 (emphasis added). Nor did Google
 20 argue that YTR uses “only” a local playback queue during the showdown. The statements quoted
 21 by Sonos explain that (i) YTR1 was able to store a local playback queue on the playback device and
 22 (ii) by the time of the accused YouTube applications, Google eliminated that ability in favor of
 23 maintaining the playback queue in the cloud. Regardless, any statements made during the
 24 showdown necessarily related only to the YTR1 functionality at issue there—namely, where a user
 25 created her own personal playlist (that was not shared in party mode). Such statements cannot be
 26 understood to apply to the separate and distinct YTR2 functionalities at issue here—party mode and
 27 service-recommended playlists. For this reason alone, there is no judicial estoppel here.

28 Second, the Court has not adopted any position that is contrary to YTR2’s use of a remote
 29 playback queue in the context of party mode and service-recommended playlists. The Court’s
 30 Showdown Order does not include any statements regarding party mode or service-recommended

1 playlists, neither of which was at issue. Nor does the Order take the position that YTR prior art used
 2 only a local playback queue in all modes. The Court granted summary judgment of non-infringement
 3 because it found that “no locally-stored queue” exists in the accused YouTube applications, and it
 4 granted summary judgment of invalidity because it found that YTR1 used a locally stored queue on
 5 the playback device in the context presented (i.e., a user-created playlists). Dkt. 316 at 8-10, 17.
 6 Nothing in those opinions is contrary to YTR2 disclosing a remote queue in the different contexts
 7 described below. There is no inconsistency or “unfairness,” and estoppel does not apply.

8 B. YTR2 Discloses A “Remote Playback Queue”

9 1. Party Mode

10 It is undisputed that YTR2 included a “party mode,” and that a YTR system operating in
 11 party mode used a “party queue”² provided by a “Lounge Server” in the cloud. “Mot.” at 6-9; *id.*,
 12 Ex. 11 ¶¶ 298, 300, 327. The party queue is a “remote playback queue” under the Court’s
 13 construction of “playback queue”—i.e., “a list of multimedia content selected for playback.” Dkt.
 14 316 at 5. Sonos does not dispute that the party queue [1] maintains identifiers for the list of videos
 15 that have been “selected for playback” and [2] is “remote” in that it is not local to the computing
 16 (e.g., phones) and playback (e.g., TVs) devices. Mot. at 6-7. This alone should end the inquiry.

17 But Sonos tries to argue that the party queue is not a “remote playback queue” by ignoring
 18 the Court’s construction and presenting arguments grounded in the following premise: a system can
 19 use either (i) a “remote playback queue” stored in the cloud or (ii) a “local playback queue” stored
 20 on the playback device (but not both). Opp. at 3-7. In particular, Sonos claims that because a
 21 playback device stores a copy of the party queue received from the Lounge Server in a “local
 22 playback queue,”³ the YTR cannot include a “remote playback queue.” *Id.* at 6. Sonos’s argument
 23 is inconsistent with its infringement positions and its expert’s opinion that “just because a sender
 24

25 ² Sonos avoids using the term “party queue” (using “party playlist” instead). Sonos does not identify
 relevant distinction between the terms, and the source code refers to a “party *queue*.” Mot. at 6-7.

26 ³ Sonos argues that a “local playback queue” must exist on the playback device because “even if the
 Lounge Server (MDx Server) goes offline,” the playback device can continue to play the
 queue. Opp. at 6-7. But the paragraph of Dr. Schmidt’s report that Sonos cites for this argument
 (Opp., Ex. F ¶ 211) says the opposite: that the playback device is *unable* to play the queue unless a
 “session is active.” Mot., Ex. 11 ¶¶ 178-179 (active session requires Lounge server to be online).

1 device might *maintain* a local copy of a queue does not necessarily mean that there is not also a
 2 remote playback queue *provided* by a cloud-based computing system.” Mot. at 7-8; Dkt. 506-1 ¶
 3 480 (emphasis in the original). Sonos has not attempted to explain its inconsistent positions. And,
 4 of course, “claim terms must be ‘construed the same way for both invalidity and infringement.’” *01*
 5 *Communique Lab., Inc. v. Citrix Sys., Inc.*, 889 F.3d 735, 743 (Fed. Cir. 2018). Sonos’s assertion
 6 that a local and a remote playback queue are mutually exclusive has no basis.

7 Even accepting Sonos’s premise that a system can include only one queue, Google has
 8 shown that when in party mode, it is the party queue in the cloud that dictates the list of videos to
 9 be played by a playback device. Mot. at 8. Sonos responds that the cloud-hosted party queue is
 10 irrelevant because playback devices “do not depend” on it to play back videos, citing only an
 11 incomplete excerpt of testimony from Google engineer Janos Levai. Opp. at 7. But Mr. Levai’s
 12 actual testimony does not support this argument. In full, Mr. Levai testified that the cloud-hosted
 13 party queue is the “source of truth” for the list of videos selected for playback and provides “all the
 14 devices in the session with that list”; it is that list, received from the cloud, that the device refers to
 15 when deciding which video to play next. Ex. 1 at 59:5-14. Moreover, Sonos’s expert also admitted
 16 that when the party queue is edited, the playback devices depend on the queue in the cloud to receive
 17 those edits. Mot., Ex. 19 at 193:17-196:23; *see also* Mot. at 4, 8. Thus, all of the evidence confirms
 18 that the party queue in the cloud is a “remote playback queue.”

19 Sonos wrongly contends that “there is no relevant difference between the YTR party mode
 20 and non-party mode,” implying that Google is characterizing the “same” functionality it argued was
 21 a “local playback queue” during the Showdown as a “remote playback queue” here. Opp. at 3-
 22 6. That is incorrect. During the showdown, Google showed that the YTR prior art allowed a user
 23 to create a queue on the user’s device (with no corresponding queue in the cloud), and accurately
 24 identified that user-created queue as a “local playback queue.” Dkt. 221-3 at 16-17. Here, Google
 25 has shown that the YTR prior art *also* allowed the creation of a shared party queue (in which a queue
 26 in the cloud runs the show) when in party mode, and accurately identified that as a “remote playback
 27 queue.” In other words, the YTR prior art uses different queues in different modes. The use of
 28

1 party queue (relevant here) as a remote playback queue renders the '033 patent invalid.⁴

2 2. Service-Recommended Videos

3 In addition, Google's motion also pointed to another separate instance of a "remote playback
4 queue" in the YTR prior art—namely, lists of service-recommended videos provided by the
5 YouTube cloud infrastructure for playback on devices. Mot. at 10-11. Sonos does not respond on
6 this point, and Sonos itself claims that the same lists of service-recommended videos in the accused
7 products constitute "remote playback queues" for purposes of infringement. Mot. at 9-11; Dkt. 482-
8 6 ¶¶ 298-99, 326. Thus, there is no dispute that the YTR prior art uses a "remote playback queue"
9 when service-recommended videos are played back by users.

10 C. **The YTR Discloses Limitation 1.7 Of The '033 Patent**

11 Limitation 1.7 of the '033 patent begins by reciting that the computing device "transmit[s]
12 an instruction for the at least one given playback device to take over responsibility for playback of
13 the remote playback queue from the computing device." Sonos agrees that a computing device
14 running YTR2 transmits an instruction (a SET_VIDEO message) for a playback device to take over
15 playback responsibility. Opp. at 9. Sonos argues that the instruction is not for taking over playback
16 responsibility of "the *remote* playback queue" because playback devices in the YTR system "use a
17 *local* playback queue." *Id.* at 8 (emphasis in the original). But, as shown above, the party queue is
18 a "remote playback queue" under the Court's construction. Section I.B.

19 The remainder of Limitation 1.7 recites that "the instruction configures the at least one given
20 playback device to (i) communicate with the cloud-based computing system in order to obtain data
21 identifying a next one or more media items that are in the remote playback queue, (ii) use the
22 obtained data to retrieve at least one media item in the remote playback queue from the cloud-based
23 media service; and (iii) play back the retrieved at least one media item." Google showed that after
24 receiving the instruction, the playback device plays the videos in the party queue by [1]
25 communicating with a Player Service to obtain Bandaid URLs, [2] using the obtained Bandaid URLs

26
27 ⁴ Sonos has, at best, shown that party mode and user-created playlists use some of the "same
28 infrastructure." Opp. at 4-6. That is irrelevant to the issue here. Moreover, the very infrastructure
Sonos points to as the "same" (e.g., MDx Servers, SET_PLAYLIST) in the YTR prior art also exists
in the accused YouTube systems, only furthering the case for invalidity.

1 to retrieve the content for videos in the party queue, and [3] playing the retrieved video
 2 content. Mot. at 11. Sonos does not challenge that this is how the prior art operates.

3 Instead, Sonos argues that Bandaid URLs are not “data identifying a next one or more media
 4 items,” as recited in subpart (i) of Limitation 1.7. Opp. at 8-11. As a preliminary matter, Sonos’s
 5 argument should be rejected because it is inconsistent with the opinions of Sonos’s expert, Dr.
 6 Schmidt, whose opening report on infringement accused Bandaid URLs of being “data identifying
 7 a next one or more media items.” Mot. at 12 (citing Ex. 14 ¶ 502). But even setting this
 8 inconsistency aside, the arguments Sonos raises in its opposition are meritless.

9 First, Sonos argues that “videoIds, not the Bandaid URLs, constitute the received ‘data
 10 identifying . . . media items’ in subpart (i).” Opp. at 8-9. But the claims and specification indicate
 11 that the “data identifying... media items” must be the data that the playback device uses “to retrieve”
 12 and “play back” the audio and video content that is played back (the media item). Mot. at 12 (citing
 13 Limitations 1.7(ii), (iii) & ’033 patent at 11:65-12:4). There is no dispute—and Sonos’s expert has
 14 admitted—that Bandaid URLs are what a playback device uses to retrieve and play back the audio
 15 and video content in the YTR system. Mot. at 12 (citing Ex. 19 at 147:6-148:10); *see also* Opp.,
 16 Ex. E ¶ 164 (playback device “uses the one or more [Bandaid] URLs to retrieve the media item from
 17 one or more ‘Bandaid’ servers . . . and then render [i.e., play back] the retrieved media item”).⁵

18 Second, Sonos admits that after a playback device receives a SET_VIDEO message (the
 19 instruction) it will obtain a Bandaid URL for the video in the party queue that should begin playing
 20 (e.g., Video A). Opp. at 9. But Sonos argues that the initial video (Video A) is the “current media”
 21 item, such that the “Bandaid URLs Google points to only identify the ***current*** media item for
 22 playback, ***not*** the next media item, as required by subpart (i).” *Id.* Here, Sonos ignores the evidence
 23 showing that a playback device ***also*** obtains Bandaid URLs for each of the next videos in the party
 24 queue (Video B, Video C, etc.). Mot. at 11; *see also* Dkt. 482-6 ¶¶ 328-29 (“for each item of media
 25 to be played back, the [] player issues a [] request to obtain a Bandaid URL”). Sonos points to no
 26

27 ⁵ Sonos mischaracterizes the dispute as whether the “data identifying . . . media items” “must be a
 28 URL, and not a videoId.” Opp. at 8. That is not the dispute. Google agrees that a videoId *or* a URL
 can be “data identifying . . . media items,” so long as they are data that the playback device uses to
 retrieve the audio and video content that is played back. In the YTR, that data is the Bandaid URL.

1 contrary evidence: the only paragraphs of Dr. Schmidt's validity report cited (Opp. at 8, Ex. F ¶¶
 2 176, 212) do ***not*** discuss how a playback device plays a next video (or mention Bandaid URLs).⁶

3 Third, Sonos argues that Limitation 1.7(i) requires that the playback device fetch the "data
 4 identifying . . . media items" directly "from [the] remote playback queue." Opp. at 9-10. But the
 5 claims merely recite that the data identify "media items that are in the remote playback queue," not
 6 that the data come from the remote playback queue. Indeed, the claims expressly state that the
 7 playback device "communicate[s] with the cloud-based computing system" generally—not the
 8 remote playback queue specifically—to obtain the data.

9 **II. THE ASSERTED '885 AND '966 PATENT CLAIMS ARE INVALID AS OBVIOUS**

10 Nearly a full year before Sonos's claimed conception date, Sonos launched its "networked
 11 multi-zone audio system" that included speaker grouping technology. *See* Mot., Ex. 6 ¶ 265; Opp.
 12 at 10-11. But Sonos and others recognized that there was one obvious drawback to this system,
 13 which was that users could not save the groups that they had created. *Id.* at 11-12. Users would
 14 thus have to recreate the same groups over and over if they wanted to use those groups at later points
 15 in time. *Id.* Thus, according to Sonos, the alleged point of novelty in the asserted claims—the "zone
 16 scene"—is merely the ability to *save* those speaker groups that users created.

17 This is an exceedingly obvious modification to a computerized system. The idea of saving
 18 information has been an intrinsic part of computers since they were invented. And nearly eight
 19 months before Sonos's conception date, Sonos received the suggestion from users to add the ability
 20 to save groups to Sonos's prior art system—exactly what Sonos claims distinguished its purported
 21 invention over the prior art. Mot. at 16-17.

22 **A. Sonos 2005 System and Sonos Forums Render Obvious the Disputed Elements**

23 None of the foregoing is disputed. Instead, Sonos argues that neither the Sonos 2005 system
 24 nor the Sonos Forums, taken separately, by themselves disclose each and every element of the
 25 claims. For the Sonos 2005 system, Sonos argues that the system did not include the ability to save
 26 groups. Opp. at 12-13. This is inaccurate, as saving a group of speakers could be invoked by

27
 28 ⁶ Sonos also points to two pages in Dr. Schmidt's opening infringement report (Opp. at 9, Ex. E ¶¶
 162-66), but those paragraphs do not relate to the YTR prior art.

1 selecting “party mode.” Regardless, Sonos’s argument misses the point. Google does not argue
 2 anticipation in its motion; Google argues that it would have been *obvious* to modify the existing
 3 Sonos 2005 system to add the feature that Sonos users suggested would improve the product, and
 4 that many other products in the same field already included—namely, saving user-created groups.

5 Similarly, although Sonos appears to concede that the Sonos Forum posts disclose saved and
 6 overlapping groups, Sonos argues that those posts do not disclose the “claimed communications
 7 between the zone players and controllers necessary for setting up and invoking zone scenes.” Opp.
 8 at 13-14. But again, Google is not arguing that the Sonos Forums alone *anticipate* the asserted
 9 claims. And Sonos does not and cannot dispute that the Sonos 2005 system already provided the
 10 claimed communications between the zone players and controllers necessary for setting up and
 11 invoking *unsaved* speaker groups. *See id.*; Mot. at 18. The simple suggestion made by users of the
 12 Sonos 2005 system, and readily understood and implementable by a person of skill in the art, would
 13 be to use the *same* functionality for *saved* speaker groups. That is, saving the groups was obvious.

14 Next, Sonos argues that the combination of the Sonos 2005 system and the Sonos Forums
 15 does not disclose the claimed “standalone mode.” Opp. at 14-15. But elsewhere, Sonos argues that
 16 any speaker that is not part of a group is, by definition, in standalone mode. Opp. at 20. Thus, any
 17 ungrouped speaker in the Sonos 2005 system was, under Sonos’s own definition, in standalone mode
 18 when added to a user-created (unsaved) group—rendering standalone mode disclosed by the Sonos
 19 2005 system. Regardless, it would have been at least obvious to try having a speaker remain in
 20 standalone mode when being added to a group given that, per Sonos, a speaker can be only in either
 21 standalone mode or group mode at any given time (Ex. 3 ¶ 109 (“each ‘zone player’ operated in one
 22 of two states at any given time”)).⁷ *KSR Int’l Co. v. Teleflex, Inc.*, 550 U.S. 398, 421 (2007).

23 Finally, Sonos argues that this combination does not disclose storing “zone scenes” at a
 24 speaker as required by dependent claim 4. Opp. at 15. But the existing Sonos 2005 system already
 25 stored (albeit temporarily) the linked groups at the speaker. Mot., Ex. 8 ¶¶ 353-56. It was thus
 26 obvious to store this same grouping information persistently.

27
 28⁷ This is true also in the context of Google’s position that there are more than just two alternative
 states a speaker can be in—standalone mode, group mode, or no/inactive mode. *Infra* §III.

1 **B. There is a Motivation to Combine Sonos 2005 System and Sonos Forums, and**
 2 **a Reasonable Expectation of Success**

3 Sonos does not raise any genuine dispute that there is a motivation to modify the Sonos 2005
 4 system as suggested by the Sonos Forums. Sonos argues that *Optivus Technology, Inc. v. Ion Beam*
 5 *Applications S.A.*, 469 F.3d 978, 989-91 (Fed. Cir. 2006) is not applicable because there “the
 6 reference itself disclosed the motivation to combine” (Opp. at 16), but the same is true here. Sonos
 7 does not dispute that the Sonos Forums were used to offer feature suggestions for Sonos products,
 8 nor does Sonos dispute that Sonos product engineers reviewed those forums to understand users’
 9 concerns regarding the products. Mot. at 16. Accordingly, Sonos user suggestions provided an
 10 explicit motivation to modify the Sonos 2005 system to incorporate saved speaker groups. Sonos’s
 11 argument that adding the ability to save a speaker group would have required “tradeoffs” resulting
 12 in an “unappetizing combination,” see *Henny Penny Corp. v. Frymaster LLC*, 938 F.3d 1324, 1331-
 13 32 (Fed. Cir. 2019), is meritless. There is no evidence that simply saving created speaker groups
 14 would result in the “decreased efficiency” suffered by the combination in *Henny Penny*; to the
 15 contrary, Sonos and others did implement saved groups without any adverse consequences.⁸ *Id.*

16 Sonos also argues that because other (post-conception date) Forum posts speculated that
 17 overlapping speaker groups would be “logically impossible” and “stupid,” a person of skill in the
 18 art would not have been motivated to make the suggested modification. Opp. at 17. Even accepting
 19 *arguendo* that the alleged non-prior art Forum posts are relevant, the Forum posts as a whole show
 20 that many users requested and proposed reasonable implementations for saving overlapping speaker
 21 groups. Mot. at 16-17. That some users did not see this as a valuable feature does *not* mean the
 22 explicitly suggested modification to the Sonos 2005 system was not disclosed and obvious.⁹ Sonos
 23 does not identify any structural limitations in the Forum posts that would have prevented a person
 24 of skill in the art from implementing overlapping groups and cites no authority for its new position
 25 that a feature must be universally perceived as beneficial to have been obvious. *Contra Gator Tail*,

26 ⁸ Sonos argues that the prior art “ad-hoc grouping” was praised in the industry (Opp. at 16), but this
 27 is not consistent with users’ suggestion to *improve* that system by adding saved groups.

28 ⁹ Sonos also argues that the Sonos Forums did not suggest modifying the Sonos 2005 system to
 communicate the zone scenes between a controller and a speaker (Opp. at 17), but as discussed
supra, the communication functionality was already present in the Sonos 2005 system.

1 *LLC v. Mud Buddy LLC*, 618 F. App'x 992, 999 (Fed. Cir. 2015) ("if a reference describes a
 2 modification as 'somewhat inferior,' then the reference does not teach away").

3 **C. The Prior Art is Enabling**

4 Sonos argues that the combination of the Sonos Forums and Sonos 2005 system would not
 5 "enable a skilled artisan to make and use the claimed invention" because they do not teach "critical
 6 details" such as the "programming" for how the speakers would interact with a controller, how the
 7 speakers would operate, and how they would be commanded to play back music.¹⁰ Opp. at 17-
 8 18. But, critically, the patent claims also do not recite any of these "details" or "programming." And
 9 each piece of prior art does not need to be "self-enabled" to render patent claims invalid through
 10 their disclosures. *ABT Sys., LLC v. Emerson Elec. Co.*, 797 F.3d 1350, 1360 n.2 (Fed. Cir.
 11 2015). Moreover, here, the Sonos 2005 system *already* disclosed the structural functionality,
 12 "details," and "programming" associated with speaker groups, including saving user-created groups
 13 temporarily and saving the "party mode" speaker group persistently. Mot. at 18-19. No
 14 "programming" or "critical details" were required to teach how to save additional information. *Id.*

15 **D. There Is No Objective Evidence of Non-Obviousness**

16 Sonos's alleged evidence of secondary considerations cannot overcome Google's strong
 17 *prima facie* case of obviousness. *ZUP, LLC v. Nash Mfg., Inc.*, 896 F.3d 1365, 1375 (Fed. Cir.
 18 2018) ("[W]here a claimed invention represents no more than the predictable use of prior
 19 art . . . evidence of secondary indicia are frequently deemed inadequate"). Sonos argues that the
 20 claimed ability to "save a group of speakers" received "substantial praise in the industry," but none
 21

22 ¹⁰ None of the enablement cases cited by Sonos are relevant. In *Auto. Techs. Int'l, Inc. v. BMW of
 23 N. Am., Inc.*, 501 F.3d 1274, 1284 (Fed. Cir. 2007), the court held that "side impact sensing was a
 24 new field and that there were no electronic sensors in existence that would detect side impact
 25 crashes," whereas here, the simple act of saving information on a computerized system was well
 26 known. Similarly in *Nat'l Recovery Techs., Inc. v. Magnetic Separation Sys., Inc.*, 166 F.3d 1190,
 27 1197 (Fed. Cir. 1999), the court found enablement lacking where the claim covered the "theoretical
 28 possibility it might be feasible to construct a system that ignores every single perturbation and flaw
 in virtually all of the items processed," which is a far cry from the simple act of saving
 information. Finally, *Pi-Net Int'l Inc. v. JPMorgan Chase & Co.*, 42 F. Supp. 3d 579, 592 (D. Del.
 2014), concedes that the reference "need not disclose what is well-known in the art," as is the case
 here, and instead found written description lacking because the specification provided no guidance
 on what a "'VAN switch' is and how it accomplishes 'object routing' or real-time transactions."

1 of this praise came from Sonos's *competitors*, where evidence of praise would be most
 2 probative. *Apple Inc. v. Samsung Elecs. Co.*, 839 F.3d 1034, 1053-54 (Fed. Cir.
 3 2016). Furthermore, as discussed *supra*, the simple act of saving a speaker group was already
 4 known in the prior art and utilized by Sonos's competitors, and therefore it is not relevant to
 5 secondary considerations. *ClassCo, Inc. v. Apple, Inc.*, 838 F.3d 1214, 1220-21 (Fed. Cir. 2016).

6 **III. GOOGLE'S REDESIGNED PRODUCTS DO NOT INFRINGE ANY ASSERTED CLAIM OF THE '885 OR '966 PATENTS**

7 Sonos's opposition misses the key reason why Google's redesigned speakers cannot and do
 8 not infringe: Google's speakers are not always in "standalone mode" or "group mode." Rather,
 9 they can be, and often are, *inactive* (not in either mode) because a user has not yet chosen a playback
 10 mode. Ex. 7 ¶¶ 3-4. When the speakers are inactive (*e.g.*, awaiting commands), a user is equally
 11 able to (i) invoke multiple speakers to operate in group mode (by selecting a particular group for
 12 playback) or (ii) invoke one speaker to operate in standalone mode (by selecting one speaker for
 13 playback). *Id.* There is nothing about inactive speakers that is more "standalone" than "group" or
 14 vice versa – they are simply a speaker system waiting for instructions. *See* Ex. 4 at 178 (speaker
 15 system awaiting instruction to play Master Bedroom, Living Room, Kitchen, Morning, or Evening).

16 The patent claims require that a speaker already operating in "standalone mode" remain in
 17 standalone mode after its addition to a group. Google's redesigned speakers do not meet this
 18 requirement because (i) a speaker that is inactive or operating in a group mode prior to being added
 19 to a new group is not operating in standalone mode when it is added to the group, and (ii) a speaker
 20 that is operating in standalone mode when added to a group terminates playback, becomes inactive,
 21 and then operates in group mode if the group is operating (or remains inactive if the group is not).

22 **A. Sonos and Dr. Almeroth's Assumption That Inactive Speakers Must Be in 23 "Standalone Mode" Is Unsupported and Illogical**

24 As a matter of semantics, Dr. Almeroth self-servingly elects to label all speakers as in
 25 "standalone mode" unless they are playing as part of a launched group. Ex. 5 at 69:11-12, 61:5-8,
 26 61:19-22; Mot., Ex. 3 ¶¶ 126, 410. But there is no evidence—nothing about the asserted patent
 27 claims or the accused products—that supports this labeling. To the contrary, the patent claims call
 28 for a speaker that is "*operating* in a standalone mode," which excludes not just speakers that are

1 *operating* in a group mode (as part of “a *launched* group”) but also those not operating in any
 2 mode. Dr. Almeroth cites no *evidence* to support his *ipse dixit* assumption that a speaker that is not
 3 operating at all is actually “operating in standalone mode” per the patent claims.

4 He does, however, cite evidence consistent with the fact that inactive speakers are not
 5 operating in any mode. For example, he accuses Google’s “launch” function of triggering “grouped
 6 mode” when a user selects a group. Ex. 3 ¶ 415. But critically, it is *the same “launch” function*
 7 that triggers “standalone mode” when a user selects an individual speaker for playback. Ex. 6 at
 8 211:5-12. Prior to receiving a launch message, speakers are in an “inactive state” (in Dr. Almeroth’s
 9 words)—they are not in any playback mode. As another example, Dr. Almeroth concedes that after
 10 a group has been launched, the accused speakers may “transition back and forth between standalone
 11 mode and grouped mode depending on how the users interact with the Google system.” Dkt. 483-
 12 4 ¶ 410. That is, he admits that it is a user’s instruction that determines whether a speaker operates
 13 in standalone mode or group mode. Although Dr. Almeroth concedes this point only after a group
 14 has been launched, it is equally true at all other times: a speaker operates according to the instruction
 15 provided by the user; without an instruction, a speaker is not operating in any mode.

16 Finally, despite Dr. Almeroth relying on the “launching” of a receiver app on the speaker
 17 group as configuring that group for synchronous playback and configuring a speaker to operate in a
 18 particular mode, Sonos argues that *reversing* this step has no effect on the configuration of a
 19 speaker. Opp. at 21-22. This position is inconsistent. If Dr. Almeroth is correct (Ex. 3 ¶ 415), then
 20 Google’s redesign, which *stops* the receiver app from running on the speaker, takes the speaker out
 21 of its playback mode and renders it inactive. *See* Ex. 7 ¶¶ 4-5.

22 B. Sonos’s Reliance on the Summary Judgment Order Is Misplaced

23 Sonos also attempts to rely on the Court’s previous summary judgment order to show that
 24 “standalone mode” is met in the accused products. But that order did not address “standalone mode”
 25 in the infringement context for the simple reason that *prior* to Google’s redesign, Sonos accused
 26 Google’s products of infringement where a speaker added to a group would continue to “operate in
 27 a standalone mode” via playback. *E.g.*, Ex. 3 ¶ 212; Ex. 4 at 153. Accordingly, Google did not
 28 dispute the “standalone mode” limitation in the prior round of briefing, and the Court did not analyze

1 it. The portion of the summary judgment order cited by Sonos exclusively discusses *written*
 2 *description* support for “standalone mode,” Dkt. 309 at 15-17, not holding (or even analyzing)
 3 whether Google’s “accused players satisfy the ‘standalone mode’ limitations.” *Compare* Opp. at 21
 4 with Dkt. 309 at 15-17. The prior order is not relevant to the infringement issues in dispute now.

5 C. Sonos’s Attempt to Distinguish the ’966 Patent Claims Fails

6 Sonos argues that Google’s redesign does not apply to the ’966 patent claims because, unlike
 7 the claims of the ’885 patent, “the asserted claims of the ’966 Patent do not require that a Google
 8 media player *continue* to operate in ‘standalone mode.’” Opp. at 23. Sonos relies on *SRI Int’l v.*
 9 *Matsushita Elec. Corp.*, 775 F.2d 1107, 1122 (Fed. Cir. 1985), but that case involved claim
 10 differentiation, which is not at issue here because Sonos is comparing the claims of two *different*
 11 patents. Even if claim differentiation did apply, however, Sonos’s argument would still fail because
 12 Google’s redesign prevents the computing device from operating in standalone mode *when* (not
 13 after) it is added to a group because of the operation of the [REDACTED]
 14 [REDACTED]. Mot. at 21-22. Accordingly, Google’s redesign does not infringe because the first zone
 15 player does not remain in standalone *mode* when added to a speaker group—regardless of the fact
 16 that it also no longer continues to operate in standalone mode afterward.

17 IV. SONOS’S WILLFUL AND INDIRECT INFRINGEMENT CLAIMS FAIL

18 Sonos asserts that it does not have to identify facts regarding Google’s knowledge of the
 19 patent and infringement or its specific intent to infringe because the Court held that Sonos’s
 20 allegation regarding Google’s declaratory judgment complaint for the ’033 and ’966 patents was
 21 sufficient to survive a motion to dismiss. *See* Opp. at 24; *Sonos, Inc. v. Google LLC*, 591 F. Supp.
 22 3d 638, 647 (N.D. Cal. 2022) (“MTD Order”). But Sonos conflates its burden at the complaint
 23 stage—which only required pleading “with *plausibility*” (Dkt. 210 at 5)—with its burden at the
 24 summary judgment stage—which requires Sonos to “go *beyond the pleadings* and *identify facts*
 25 which show a genuine issue for trial.” *Fairbank v. Wunderman Cato Johnson*, 212 F.3d 528, 531
 26 (9th Cir. 2000). Indeed, the Court expressly caveated that Sonos’s allegation was “enough at *that*
 27 *stage* to allege specific intent” but that any “questions about the *reality* of Google’s subjective intent
 28 and potential egregious behavior will be dealt *at later stages* as a *more complete record is*

1 ***developed.***” Transferred Action, Dkt. 210 at 5 (emphasis added). The “record” now consists of
 2 two-plus years of discovery, over 25,000 Google documents, and 23 depositions of Google
 3 witnesses—yet Sonos cannot identify *any* evidence that Google knew of or had the specific intent
 4 to infringe the ’033 or ’966 patents pre-suit.

5 Forced to concede this, Sonos argues that Google was “at a minimum, willfully blind to its
 6 infringement. Opp. at 24. This secondary argument also fails because none of the purported
 7 “evidence” cited demonstrates—as would be required for Sonos utilize willful blindness as an
 8 alternative to actual knowledge of the patents—that Google “subjectively believed there was a high
 9 probability” that its products infringed the ’033 and ’966 patents or that Google deliberately avoided
 10 learning about that infringement. *Vasudevan Software, Inc. v. TIBCO Software Inc.*, 2012 WL
 11 1831543, at *5 (N.D. Cal. May 18, 2012). In fact, Google did the opposite, assessing the allegations
 12 and accused products to form sufficient knowledge to file declaratory noninfringement claims.¹¹

13 Sonos’s citations to its technical experts are inapposite as they cannot opine on Google’s
 14 subjective intent. Moreover, the excerpts merely discuss their understanding of the law for indirect
 15 infringement, their disagreement with Google’s experts’ noninfringement opinions, Google help
 16 pages on casting and speaker grouping, and mischaracterizations of Google’s patent showdown
 17 positions. Opp. at 24 (citing Exs. G & L). None of these paragraphs identify *any* facts suggesting
 18 that Google *subjectively* believed that its products were infringing, that Google engaged in “active
 19 efforts . . . to avoid knowing about” its infringement, or that Google “purposefully and culpably
 20 encourage[d]” another party to infringe. *Lagan Precision Co, Ltd v. Genius Elec. Optical Co.*, 86
 21 F. Supp. 3d 1105, 1119 (N.D. Cal. 2015); *DSU Med. Corp. v. JMS Co.*, 471 F.3d 1293, 1307 (Fed.
 22 Cir. 2006). The help pages generically reference casting and grouping of speakers—which Sonos
 23 admits is broader than the claimed inventions—such that the instructions “do not evidence a specific
 24 intent to encourage infringement, since they teach a [use] which [Google] could have reasonably

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 26 ¹¹ Sonos’s contention that Google represented “it had exactly as much knowledge as it needed to
 27 determine that it was not infringing, but lacked any reason to know that it *was* or could be infringing”
 28 is both false and nonsensical. Opp. at 25. If Google had enough knowledge to determine it was not
 infringing, it would lack any reason to believe it *was* infringing. Moreover, Google’s
 noninfringement position is based on analysis that was done *after* Sonos sent a draft complaint.

1 believe was non-infringing.” *Vita-Mix Corp. v. Basic Holding, Inc.*, 581 F.3d 1317, 1329 (Fed. Cir. 2
2 2009). Sonos also fails to indicate how its interrogatory response, which merely parrots the willful 3 blindness standard, discloses any disputed facts.¹² See Opp. at 24 (citing Ex. Q at 347).

4 As for the ’885 patent, Sonos again points to an order from the pleading stage noting that “a 5 jury could plausibly conclude” that the draft amended complaint provided notice. See Opp. at 24. 6 But Sonos again fails now to identify *any* evidence in the record demonstrating Google’s state of 7 mind. On the contrary, Google’s lack of specific intent to infringe or subjective belief of a high risk 8 of infringement is shown by its prompt implementation of redesigns after the Court’s September 9 and October 2022 orders on the ’885 patent. Mot. at 20; see *Google LLC v. Princeps Interface* 10 *Techs. LLC*, 2020 WL 1478352, at *3 (N.D. Cal. Mar. 26, 2020) (noting that implementing a 11 redesign “would show Google’s good faith attempt to avoid infringement”). And although the Court 12 found it “critical[]” that Sonos filed its amended complaint “forty day[s]” after the meet-and-confer 13 (Transferred Action, Dkt. 210 at 6), Sonos actually filed the motion to amend on January 14, 2021, 14 three days after the meet-and-confer. (*Id.*, Dkt. 39 at 10). At that point, Google had already asserted 15 noninfringement positions and served invalidity contentions for the now-invalidated and dismissed 16 ’206 patent (to which the ’885 patent is a continuation) and the ’966 patent (to which the ’885 patent 17 is related). See Dkt. 41 ¶¶ 39, 46 (pleading that the accused products did not have a “zone scene,” 18 a term in every independent claim of the ’206, ’966, and ’885 patents). This further demonstrates 19 that Google believed in good-faith it was not infringing and lacked the specific intent to infringe.

20 Finally, Sonos asserts that Google did not move “as to *post*-complaint willfulness and 21 indirect infringement.” Opp. at 24. But the Court’s prior order foreclosed this theory: “Recognizing 22 the efficacy of cease-and-desist letters, this order joins those district courts that do not generally 23 allow the complaint to serve as notice.” MTD Order at 645. Without adequate facts of Google’s 24 pre-suit knowledge, Sonos’s willful and indirect infringement claims cannot stand.

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26
27 ¹² Sonos inconsistently contends that Google “at least failed to investigate whether it infringed the asserted patents” in support of its willful blindness theory (Opp., Ex. Q), and that Google must have been “conducting its investigation days, weeks, or months prior to September 28, 2020” to argue 28 that Google had actual knowledge. Transferred Action, Dkt. 211 ¶ 60.

1 DATED: February 28, 2023

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Attorneys for Google LLC

CERTIFICATE OF SERVICE

2 Pursuant to the Federal Rules of Civil Procedure and Local Rule 5-1, I hereby certify that,
3 on February 28, 2023, all counsel of record who have appeared in this case are being served with a
4 copy of the foregoing via the Court's CM/ECF system and email.

/s/ Charles K. Verhoeven
Charles K. Verhoeven